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SETTING THE STAGE FOR CHANGE IN THE JUNIOR COLLEGE--A CASE STUDY.

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DESCRIPTORS- *JUNIOR COLLEGES, *INSTRUCTIONAL INNOVATION, CURRICULUM DEVELOPMENT, CURRICULUM PLANNING, EDUCATIONAL CHANGE, *ADMINISTRATOR ROLE,

THE ROLE OF A JUNIOR COLLEGE VOCATIONAL EDUCATION ADMINISTRATOR IN EFFECTING CURRICULAR INNOVATION WAS STUDIED IN RELATION TO THE FOLLOWING RATIONALE DEVELOPED FOR THE STUDY. CHANGE OR INNOVATION MAY BE PLANNED OR UNPLANNED, IT MAY BE VOLUNTARY OR FORCED, AND IT MAY ORIGINATE WITHIN OR OUTSIDE THE ORGANIZATION. FACTORS AND AGENTS STIMULATING INNOVATION ARE STUDENTS, SOCIETY, TEACHERS, ADMINISTRATORS, BOARDS OF EDUCATION, STATE AND FEDERAL GOVERNMENTS, PUBLISHERS AND MANUFACTURERS, RESEARCH AND DEVELOPMENT ORGANIZATIONS, ECONOMIC CONDITIONS, AND INTERNATIONAL RELATIONS. ELEMENTS WHICH CAN BE CHANGED INCLUDE CONTENT, METHOD, STAFF, MATERIALS AND EQUIPMENT, TIME, SPACE, GROUPING, GRADING AND TESTING PRACTICES, AND STUDENT ACCOUNTING. IT MAY BE ASSUMED (1) THAT, TO MEET PRESENT AND FUTURE NEEDS OF STUDENTS AND SOCIETY, THERE IS A NEED FOR CURRICULAR AND INSTRUCTIONAL CHANGES IN JUNIOR COLLEGES, AND (2) THAT THE JUNIOR COLLEGE ADMINISTRATOR HAS A MAJOR ROLE TO PLAY IN EFFECTING CHANGE. (WO)

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SETTING THE STAGE FOR CHANGE IN THE JUNIOR COLLEGE:

A CASE STUDY

UNIVERSITY OF CALIF.
LOS ANGELES

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CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

by

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CHAPTER I

THE PROBLEM

Change has become a way of life in modern America. The pace of change has quickened in the last decade, and all evidence points in the direction of a quicker pace in the decade ahead. Educational institutions have been swept along in the currents of change as have most other institutions in our society. Unlike many other institutions, however, educational institutions have been looked to by society as a vehicle by which society can solve most of its change-related problems. Society not only looks to educational institutions with expectations of change, but also demands that educational institutions produce answers to change-oriented problems generated in other institutions. As society looks to the junior college for answers, they look to the junior college administrator for leadership.

Statement of the Problems

The problems dealt with in this paper can best be stated as: (1) How does the junior college administrator set the stage for change? (2) How does he influence staff members? (3) How does he create a climate in which change not only <u>can</u> take place but <u>does</u> take place? (4) What strategies can he use? (5) What obstacles must he overcome?

Assumptions

In making this study, several assumptions have been made: (1) There is a need for some changes to be made in junior college curriculum and instruction in order to meet the needs of students and society today and tomorrow. (2) The junior college administrator has a major role to play in bringing about change. (3) There is a rationale for change which can be found in the literature on change and which can be applied to the junior college.

Hypotheses

Two hypotheses have been formulated for this study: (1) Successful endeavors to bring about change can be explained by the rationale. (2) Unsuccessful endeavors to bring about change can also be explained by the rationale.

Methods and Procedures

The literature will be surveyed. Those documents that contribute to a rationale on change will be studied in depth. A rationale will then be constructed. A change agent in one junior college will be studied by use of an interview technique to determine what he does to bring about change at his junior college. His endeavors will then be compared to the rationale for change. His strategies for change will then be evaluated as to their effectiveness and chances of success as predicted by the rationale.

CHAPTER II

REVIEW OF LITERATURE

Change and innovation have been two of the main themes of American education during the past decade. Library shelves are filled with reports of new programs being tried in schools, new programs being adopted by school districts, and new programs being developed by curriculum experts. Until recently, however, not much had been written about the change process itself or the strategies that can be used to bring about change. Only recently have educators become interested in the process of change. In the last four or five years, several books and a number of articles have been published which deal with process of change.

In 1962, Everett M. Rogers published his classic, Diffusion of Innovations, in which he analyzed the adoption process in great detail. Rogers, who is a rural sociologist, dealt with the diffusion of innovations in agriculture. His analysis of the adoptive process has proven useful even in the field of education, and later writers have drawn heavily upon his rationale. (13)

Bienenstok warned educators in 1965 against the hazards of relying too heavily upon the findings of researchers in other fields when dealing with change in education. He pointed out that:

> In recent years, extensive research has been conducted on ways and means of introducing change into institutions, communities, and cultures. The knowledge so gained, while helpful, is not easily transferable to the educational setting. The adoption of new educational practices is not necessarily influenced by the same factors nor does it follow the same course as the acceptance of new health practices, new agricultural practices, or new industrial practices. (1:420)

Later in the same article, Bienenstok points out that:

> . . . an attempt to elicit the support of people for an educational innovation can ill afford to ignore their values, their interests, and their expectations. A radical departure from traditional practice is more likely to be accepted if its benefits and advantages are materially compelling, its goals and purposes are

psychologically attractive, and the premises on which it is based are convincing to the interested group in the community. (1:428)

Kimbrough has collected and reported an immense amount of data which substantiates Bienenstok's statements. Anyone interested in successfully bringing about change in a school system or junior college district cannot afford to overlook the unique contributions that Kimbrough made when he published Political Power and Educational Decision-Making. He points out that all educational institutions are located in a social setting which is ruled by a power structure. He dovotes the book to the study of this power structure and a discussion of how it works and what it values. (6)

Richard O. Carlson has researched and written about change in education. In his book Adoption of Educational Innovations, he studied school superintendents to discover what caused certain superintendents to adopt new innovations while others did not. The study found that superintendents look to fellow superintendents for advice. They generally seek advice from superintendents who they consider have more status than they have. Superintendents who have frequent and friendly contacts with other superintendents tend to be adopters, while superintendents who are social isolates tend to be non-adopters. (3)

In an article published by Carlson, he contends that there are three barriers to change in the public schools: (1) the absence of a change agent, (2) a weak knowledge base, and (3) "domestication" of the public schools. Clients are not free to choose a school like patients can choose a doctor. (3)

Mathew B. Miles, in 1964, published his Innovation in Education, in which he not only presented a rationale for change, but cited many examples of change in the nation's schools. This volume is probably the most extensive work of its kind in print today. Even though it was more appropriate in 1964 when it was "hot off the press" and was almost as current in its reporting as a daily newspaper, the analyses that Miles and his fellow contributors made are still valid. (9)

Henry M. Brickell's Organizing New York State for Educational Change (1961) has probably had more impact on the nation's schools than any other single volume dealing with strategies for educational change. (2) The "Brickell Model for Change" influenced the nation's schools through Titles III and IV of the Elementary-Secondary Education Act of 1965. These two titles draw heavily from his model.

In 1966, the NEA published PACE: A Guide for Developing Projects to Advance Creativity in Education. (10) This is a handbook designed to assist educators interested in bringing about creative innovations in education to get financial support for such projects from the federal government under the provisions of Title III of PL 89-10, 1965. This how-to-do-it manual helps educators overcome the problems of financial support for innovative projects, a problem that has long gone unsolved in education, but which is receiving considerable attention at the present time.

Carl R. Rogers calls for self-directed change via small encounter groups composed of school board members, administrators, teachers, students and parents. Some of these would be homogeneous groups, while others would comprise representatives from different levels of the system. (12:717-730)

> The goal of education must be to develop a society in which people can live more comfortably with change than with rigidity. In the coming world the capacity to face the new appropriately is more important than the ability to know and repeat the old. . . A way must be found to develop a climate in which the focus is not upon teaching, but on the facilitation of self-directed learning. (12:717-718)

Professional teacher organizations have also shown interest in the change process. The NEA has published a booklet entitled Planning and Organizing for Teaching, which is the product of a committee composed of classroom teachers, school administrators and university professors. The document attempts to make thoughtful and creative recommendations to serve as a guide for the profession and the public in their combined efforts to

study and improve the quality of the instructional programs in the schools. (11)

MacKenzie points out that the quality of schooling is dependent upon the learning experiences of children and youth. There are six categories of influence on these experiences which one can manipulate or modify: (1) teachers, (2) students, (3) subject matter, (4) methods, (5) materials and facilities, and (6) time. (7:27)

He asks, "Who are the agents for curricular change?" They are students, teachers, principals, supervisors, superintendents, boards, local communities, state legislatures, state boards and departments of education, and state and federal courts. Indirect action may be taken by foundations, industrialists, the national government, non-educationists, academicians, and educationists. (8:186-187)

Telfer has listed the forces causing curriculum change as: (1) Sputnik, (2) social pressures, (3) changing social order, (4) fear of world conflict, (5) computers, (6) national study groups, (7) federal and foundation aid, and (8) new light on education. (14:131)

Telfer has identified the blocks to curriculum improvement as: (1) lack of time, (2) lack of effective means of communication, (3) lack of agreement of what is to be done, (4) lack of money to do the necessary tasks, (5) staff turnover, (6) poor teacher preparation in science and mathematics, (7) lack of teacher interest and cooperation, (8) lack of top level administrative support, and (9) teacher apathy. (14:132)

Telfer has outlined some procedures for getting the staff involved: (1) round-table conferences, (2) creating a problem situation, (3) weekly staff meetings for in-service training, (4) brainstorming sessions, (5) subject area committees, (6) informal discussions, (7) good communications between staff and administration, (8) summer workshops, (9) tell-show-do-check activities, and (10) conferences for specific needs. (14:135)

In an article entitled "Old Ways Die Hard," Hiner states:

> . . .William Van Til has compared changing the curriculum to moving a cemetery, "Until you try it, you do not realize how many friends the dead still have" . . .resistance to change centers around two factors: physical environment and people. . .educational change is a special kind of change, school people are a special kind of people, and a school system is a special kind of place. . . A school system is a complex social system, that is an interdependent assemblage of persons, objects, and ideas that tend to function in unison. Further, it is a bureaucracy whose members strive for security through rules stressing tenure, seniority, and retirement. . . Resistance comes from bureaucracy and teachers whose individual perspectives and values are not congruent with the desired changes. . .the immediate job of supervisors is to avoid resistance from either source by not using line or authority channels to initiate change. Channels are best suited to maintain status quo because they bring about change only by compliance. . . The key to success is identification and internalization. (5:551-553)

Willower has identified the sources of the resistance to change as: (1) threat that change poses to status, (2) benefits to one part of the organization at the expense of other parts, and (3) lack of information or skill. He has listed the forms of resistance as (1) the Rebecca Myth,* (2) sloppy work--apathetic indifference, (3) rigid conformity, and (4) "red book" warning system.** Because schools do not pick their clients, there is an overconcern for pupil control, which is a focal point for resistance to liberalizing changes in schools. (15:257-263)

*The Rebecca Myth applied to schools means that the teachers are likely to compare a new administrator who is trying to bring about change with the old administrator he replaced.

**Teachers sometimes spread the warning that the supervisor, principal, or superintendent is in the building by sending a student from one room to another with a red book.

CHAPTER III

A RATIONALE FOR SETTING THE STAGE FOR CHANGE

This chapter has as its purpose the establishment of a meaningful, useful rationale for bringing about change in public education. Several writers have written about the subject. Their works have been summarized in Chapter II. Some of these writers have presented sophisticated rationales to explain the change process; while others have only scratched the surface.

Positions taken by writers discussing the change process in education tend to polarize around two extremes. One position, best exemplified by Henry Brickell's (2) writings, is that change starts from the outside or at the top and filters into the organization, or down through the organization. The other position, best exemplified in the article by Carl R. Rogers (12), is that change is a grass-roots movement, or at least that it should be a grass-roots movement if it is to succeed. This writer has chosen to be eclectic, because it is quite evident that both positions are right as far as each goes. The problem is that neither position encompasses the change process in total.

Each writer tends to write his rationale from his vantage point. Brickell's vantage point was that of a consultant hired by the New York State Department of Education to formulate a plan that could be implemented by the State Department of Education. Brickell, being a school administrator and an employee of the Department, wrote from that vantage point. Rogers, on the other hand, being a leader of a school of psychology that contends that the patient will find the right answers to problems he faces by looking inward with the help of his therapist, relies heavily upon people generating change if allowed to interact with one another in an open, non-threatening environment.

What Can Be Changed?

Several writers discussed in Chapter II have listed elements in the educational organization process that can be changed. Some of the more obvious are discussed below:

1. Content. The facts, concepts, rules, generalizations, the things taught, can be changed. New subjects or courses can be adopted, old ones discontinued. New content can be injected into existing courses or subjects, obsolete content dropped. The content can be reshuffled and presented in a different order at a different time.

2. Method. Lectures can be replaced by discussions. Oral reports can be replaced by debates. Field trips and laboratory experiments can be introduced. Methods that foster creative and analytical thinking can replace methods that demand the parroting back of memorized facts. A variety of methods can be used instead of the same method day after day.

3. Staff. One way to change staff is to retrain them to teach in new ways. This is one of the most difficult tasks an administrator can tackle. Staff, like content, can be reshuffled. Team teaching is one way to reshuffle staff; another is the hiring of teacher aids and clerical help in order to create a differentiated staff. Tenure and merit pay can also have an effect on staff. Student and administration evaluation also can have its effect.

4. Instructional Materials and Equipment. By adopting new and different books and equipment, instruction can often be changed. Adoption of some of the new electronic teaching devices and programmed-teaching materials can literally turn the teaching procedures up-side-down.

5. Time. Changing the length of class periods and the frequency of class periods can alter an educational program. Flexible scheduling and the devotion of more time to individual learning activities can bring about change.

6. Space. As Churchill stated in one of his speeches after the end of World War II, when addressing himself to the task of rebuilding Britain, "Men shape buildings, and then buildings shape men." The kinds of spaces that exist in a building determine the types of programs that can be carried on in that building. Change the building, and you often change the program.

7. Grouping. Students can be grouped in groups numbering hundreds, or dozens, or even individuals. They can be grouped in heterogeneous groups or homogeneous groups. With the use of the differentiated staff, provisions can be made for sub-grouping within the larger group.

8. Grading and Testing Practices. Many changes have been stopped because of grading and testing practices. The liberalization of instruction and curriculum requires the liberalization of the accounting procedures. Grades and tests are the accounting devices that control teachers.

9. Attendance Accounting. Attendance accounting procedures have the same dampening effect on curriculum and instructional changes in those states where students are required to be present in a class for a given number of hours under the direct supervision of a certificated teacher in order for the school to collect state aid. This has a limiting effect on grouping of students and staff.

Who and What Conditions Bring About Change?

Many factors cause changes to occur. Some of the more obvious factors are discussed below:

1. Students. Students and their needs and expectations change. A select student body is generally more homogeneous. An open-door policy creates a diverse student body, which in turn requires a diverse offering of courses to avoid a high dropout rate.

2. Society. The priorities of society change from time to time. In

one time period society may be obsessed with international competition and survival as a world power; while, during other periods, society emphasizes human values.

3. Teachers. As teachers become better prepared to teach because of longer preparation in college and university programs, their desires and expectations often change. Teacher militancy has become popular among teachers because their expectations have not been fulfilled through existing channels. Teachers are demanding a voice in working conditions, class size, methodology, curriculum, grading practices, and a host of other areas.

4. Administrators. Traditionally, administrators, especially the chief administrative officer, have had a key role to play in bringing about change. In years past, if the CAO did not support an innovation, it did not go very far in the system and did not last very long. With teacher organizations entering the administrative domain, it is difficult to assess the impact they will have on the administrator's prerogative to bring about change.

5. Boards of Education. Boards of education certainly influence change. Brickell (2) points out, however, that boards of education in most communities are not strong agents in determining the path of educational innovation, but their influence is decisive when exerted.

6. State and Federal Governments. State governments usually influenced educational change by legislative mandate and financial support for new programs. The Federal Government brings about change by strong financial support aimed at specific programs. Although federal support programs do not require schools to participate, the added dollars and new programs are so attractive to most communities that it is politically difficult for a board and superintendent to refuse to participate.

7. Publishers and Manufacturers. The development of new "software" and "hardware" by publishers and manufacturers is a key contribution to change.

There could be no wide spread change without the mass printing and manufacturing of new instructional materials and equipment.

8. Research and Development Organizations. Without vast sums of money being pumped into research and development projects, we would not have made the strides in changing education that we have made in the last decade. Heavily funded R & D projects have been able to risk capital that publishers and manufacturers could not afford to risk.

9. Economic Conditions. The economic state of the nation, the state, and the local community has an impact on educational change. If educational expenditures receive a lower priority in the federal budget than national security, as has happened this year, then money to create innovative programs is not available. On the local level, school systems that are poor tend not to innovate. All available resources are needed to maintain the status quo.

10. International Relations. The "world situation" has a definite influence on educational change. During times of international conflict, programs that strengthen the military effort such as math, science, and foreign languages are stressed. During times of peace, courses stressing world literature, history, and cultures have a better chance of being strengthened.

How Does Change Occur?

So far our discussion of change can be reduced down to three statements: (1) Change can be planned or unplanned. (2) Change can be voluntary or forced. (3) Change can come from within the organization or from outside the organization. Let us explore these three statements.

Nothing stands still very long today. The rate of change is faster today than it has ever been before in history. The issue for educational institutions is not whether they will change or not change; the issue is whether they will have a voice in their direction of change or whether they

will drift helplessly in the currents of change without any pre-determined course. Many positive changes have occurred by accident, no doubt, but many negative changes have also occurred. The effective school administrator cannot afford to let change occur by chance in an unplanned, hit-and-miss fashion. He must give direction to change.

Change can also be voluntary or forced. Rogers (12) would contend that only voluntary change is real change. Brickell (2:30-31) would contend that the administration can successfully introduce and adopt innovations without the support of a majority of the staff. This point will be discussed later in this chapter.

Change can come from within the organization or from outside the organization. Little change is initiated from within the organization according to Brickell. (2:22) Organizations tend to seek stability and remain in a stable posture. Little significant change can happen without the support and encouragement of top administration. Rogers would disagree, however, contending that administrators have not created a climate for change. (12)

Generalizations about the Diffusion of Innovations

Everett M. Rogers, in his Diffusion of Innovations, summarizes his findings in a list of 52 generalizations. Although, these generalizations were derived from the field of rural sociology and are based on the study of individual farmers and not educational organizations, many of them are applicable to education and are worth including in a paper such as this.

1. Innovativeness of individuals is related to a modern rather than a traditional orientation.

2. An individual's innovativeness varies directly with the norms of his social system on innovativeness.

3. Relatively later adopters are more likely to discontinue innovations than are earlier adopters.

4. Impersonal information sources are most important at the awareness stage, and personal sources are most important at the evaluation stage in the adoption process.

5. Cosmopolite information sources are most important at the awareness stage, and localite information sources are most important at the evaluation stage.

6. There is little evidence that lack of knowledge about innovations actually delays their adoption.

7. Awareness occurs at a more rapid rate than does adoption.

8. The first individuals to adopt innovations require a shorter adoption period than do relatively later adopters.

9. The awareness-to-trial period is longer than the trial-to-adoption period.

10. The awareness-to-trial period is shorter for relatively earlier adopters than for later adopters.

11. The trial-to-adoption period is longer for relatively earlier adopters than for later adopters.

12. Earlier adopters try innovations on a smaller scale than later adopters.

13. A crisis emphasizes the relative advantage of an innovation and affects its rate of adoption.

14. The realtive advantage of a new idea, as perceived by members of a social system, affects its rate of adoption.

15. The compatibility of a new idea, as perceived by members of a social system, affects its rate of adoption.

16. The complexity of an innovation, as perceived by members of a social system, affects its rate of adoption.

17. The divisibility of an innovation, as perceived by members of a social system, affects its rate of adoption.

18. Relatively earlier adopters may perceive divisibility as more important than later adopters.

19. The communicability of an innovation, as perceived by members of a social system, affects its rate of adoption.

20. Adopter distributions follow a bell-shaped curve over time and approach normality.

21. Earlier adopters are younger in age than later adopters.

22. Earlier adopters have higher social status than later adopters.

23. Earlier adopters have a more favorable financial position than later adopters.

24. Earlier adopters have more specialized operations than later adopters.

25. Earlier adopters have a type of mental ability different from later adopters.

26. Impersonal sources of information are more important than personal sources for relatively earlier adopters of innovations than for later adopters.

27. Cosmopolite sources of information are more important than localite sources for relatively earlier adopters of innovations than for later adopters.

28. Earlier adopters utilize information sources that are in closer contact with the origin of new ideas than later adopters.

29. Earlier adopters utilize a greater number of different information sources than do later adopters.

30. Earlier adopters have more cosmopolite than later adopters.

31. Earlier adopters have more opinion leadership than later adopters.

32. There is considerable shifting of individuals in a social system from one category to another over time.

33. Laggards are most likely to drop out of the social system.

34. Innovators are perceived as deviants by other members of their social system.

35. Innovators perceive themselves as deviant from the norms of their social system.

36. Personal influence from peers is most important at the evaluation stage in the adoption process and less important at other stages.

37. Personal influence from peers is more important for relatively later adopters than for earlier adopters.

38. Personal influence from peers is more important in uncertain situations than in clear-cut situations.

39. Opinion leaders conform more closely to social system norms than the average member.

40. There is little overlapping among the different types of opinion leaders.

41. Opinion leaders use more impersonal, technically accurate, and cosmopolite than their followers.

42. Opinion leaders are more cosmopolite than their followers.

43. Opinion leaders have more social participations than their followers.

44. Opinion leaders have higher social status than their followers.

45. Opinion leaders are more innovative than their followers.

46. Each adopter category is mainly influenced by individuals of the same or a more innovative adopter category.

47. Social system norms on innovativeness seem to determine, at least in part, the innovativeness of opinion leaders.

48. Differences in innovativeness between individuals are a more important barrier to the flow of ideas in a social system where the norms are modern than where they are traditional.

49. The extent of promotional efforts by change agents is directly related to the rate of adoption of an innovation.

50. Commercial change agents are more important at the trial stage than at any other stage in the adoption of an innovation.

51. Commercial change agents are more important for earlier adopters than for later adopters at the trial stage.

52. Change agents have more communication with higher-status than with lower-status members of a social system. (13:311-314)

Generalizations Generated by a Study of Change in Education

Henry M. Brickell formulated a list of generalizations about change in education after studying schools in the State of New York. Twelve of these generalizations that are applicable to American schools in general are presented below.

1. Parents' and citizens' groups in most communities do not exert a direct influence on the adoption of new types of instructional programs, but their influence is decisive when exerted. Implication: In disseminating new programs, it is not necessary to arouse the active enthusiasm of local parents, but it is necessary to avoid their active opposition. (2:20)

2. The board of education in most communities is not a strong agent in determining the path of educational innovation, but its influence is decisive when exerted. Implication: New programs must be disseminated in a manner which will not arouse the opposition of boards of education. (2:21)

3. New types of instructional programs are introduced by administrators. Contrary to general opinion, teachers are not change agents for instructional innovations of major scope. Implication: To disseminate new types of instructional programs, it will be necessary to convince administrators of their value. (2:22)

4. Classroom teachers can make only three types of instructional change in the absence of administrative initiative: (1) change in classroom practice, (2) relocation of existing curriculum content, and (3) introduction of single special courses at the high school level. Implications: (1) Classroom teachers cannot be expected to introduce new types of instructional programs without administrative attention and (2) In-service courses designed for individual teachers rather than for entire faculties (that is, courses designed to improve the teacher rather than to change the program) should be limited to matters which can be accomplished in one of the three ways indicated above. (2:24)

5. Professional suspicion about the value of innovations in other school systems, and even about the sincerity of other innovators, is a widespread and serious inhibitor of educational change. Suspicion is an inevitable concomitant of efforts to disseminate new programs and is created in part by those very efforts. Implication: Recommended new programs must be disseminated in a way which will allow the practitioner to quell his own suspicions. (2:26)

6. The most persuasive experience a school person can have is to visit a successful new program and to observe it in action. Speeches, literature, research reports and conversations with participants outside the actual instructional setting are interesting but relatively unconvincing. Implication: Recommended new programs must be demonstrated so that they can be observed in action. (2:27)

7. Anything abnormal, unreal, or artificial in the circumstances surrounding an observed program--that is to say, anything appreciably different from conditions in the visitor's own school system--can rob a visit of persuasive effect. Implication: Recommended new programs must be demonstrated in schools quite similar to those from which visitors come. (2:28)

8. New instructional programs can be successfully introduced despite initial apathy or even opposition on the part of a number of teachers. Implication: It is not necessary to wait until faculty opinion is unanimous before making a change in instructional pattern. (2:30)

9. The most successful innovations are those which are accompanied by the most elaborate help to teachers as they begin to provide the new instruction. Implication: Instructional innovation should be accompanied by substantial, continuing assistance to teachers. (2:31)

10. Instructional innovations are almost always evaluated by observing the reactions of the students while they are receiving the new instruction. In the eyes of the practitioner, no other evidence outweighs student reaction as a measure of success. More complex evaluation techniques are rarely used. Implications: (1) Local school systems cannot be

expected to generate, on their own initiative, anything more than observational evidence of the value of their innovations. (2) Observers who visit demonstrations of recommended new programs should be given an opportunity to talk with students about their reactions to the new instruction. (2:33)

11. Instructional innovations usually seem to the people using them to be distinctly better than what they were doing before. Implication: The reactions of users cannot be relied upon as the sole method of evaluating novel approaches. (2:34)

12. The attention, encouragement and recognition given to teachers by people outside the classroom during the introduction of new programs are among the strongest causes of their success. Implication: In evaluating new programs, attention, encouragement and recognition should be supplied equally to both the experimental and the comparison settings. (2:35)

CHAPTER IV

A CASE STUDY OF THE CHANGE PROCESS

The writer chose the Dean of Vocational Education at a Southern California junior college for the subject of a case study. The college involved in the study is governed by a Board of Trustees that also governs a high school district that shares the same boundaries. The President of the college is also the Superintendent of the college district. The district is a single campus district, which is experiencing rapid enrollment growth and is currently expanding a campus which is only several years old. The campus was master planned to allow for rapid expansion at a minimum cost.

The Dean of Vocational Education is currently serving his second year on the job. Before coming to the college, he had served as Director of Curriculum for a small unified school district in the same county as the college. Before that he had been employed by the County Department of Education as a Curriculum Coordinator. Previous to that, he had served as an elementary principal and elementary teacher. Before coming to the college, he had had no junior college experience and no vocational experience outside of the field of education in recent years. He was hired as Dean of Vocational Education because of his interest in bringing about change in educational institutions and because of his experiences at various levels of education in bringing about new and innovative programs.

For the purpose of this study, three specific innovative programs that the Dean has been working on will be studied. One of these programs, the development of a two-year sequence of courses leading to an AA Degree in Aquatechnology, falls into the category of being a research and development project. The second program discussed, the Home Health Aid Training Program, falls into the category of being a field test of a new program. The third

program discussed the AA Degree program in Aeronautics, is the adoption and implementation of a program that had already existed in other junior colleges.

Information was collected from written descriptions of the programs and a taped interview with the Subject of the study, namely the Dean of Vocational Education. In the following paragraphs a summary of the interview will be presented and then a critique will be given of the project. The critique will refer to the rationale for change in Chapter III.

Case Study - Part One: The Development of a New AA Degree Curriculum in Aquatechnology

In August 1968 the Dean of Vocational Education became aware of a growing interest in oceanography in the metropolitan community which his college serves. The Chamber of Commerce had appointed a committee on oceanography. The Dean met with the chairman of the committee to discuss the role of the junior college in the oceanographic field.

The subject surveyed the junior college faculty to find teachers who might have potential interest in the field. He talked about the field of oceanography and ways of getting a program into operation. The Biology Department Chairman showed an interest.

The Dean and the Biology Department Chairman began reading background information in the field of oceanography to determine specific jobs that exist in the field. The School Relations Officer at the local University of California campus recommended experts in the field that the Dean could use as a source of information. The Dean identified 45 potential employers of junior college graduates with training in aquatechnology.

The Director of Marketing for a large cannery advised the Dean to proceed cautiously so as to train the right man for the right job at the right salary. The Dean also met with a number of leaders in the field to find if

they thought there was a need for trained technicians. These people estimated that the first thirty graduates would all find jobs.

The Dean then established liaison with a large oceanographic laboratory located in the community. The laboratory owns several sea-going research vessels that could possibly be used in the proposed program.

The position of aquatechnician was identified and described by the Dean. A survey made of national educational offerings found that no institution was offering a program at the technician level.

The Sea Grant Legislation was studied to: (1) establish a source of funding and (2) to find who the national leaders in the field are who testified at the hearings on the Bill. The Dean then contacted these experts to get their opinions on the proposed program. Encouragement, but not much hope was offered.

Labor unions were contacted. The Cannery and Fisherman's Union was supportive in having students go to sea without belonging to the Union. This cleared the way for the use of ten vessels for training purposes.

The interested faculty members were asked to put together a curriculum based on performance objectives. The first year of the program would be academic followed by a summer cruise. The second year would be devoted to operations.

The Chairman of the Biology Department left the college, leaving much of the work to the remaining faculty members. Eight instructors were assigned to work on the specifics of the proposal. They were to do this work on their own time without extra pay. Very little observable progress was made.

No money had been budgeted for research and development of the program. All planning had to be done with volunteer help. The large research laboratory discussed above wanted to donate $15,000 to get the program going, but corporate policy would not allow the local division to make the grant to a public institution.

The Head of the Pacific Support Group, U.S. Office of Naval Oceanography, arranged a cruise for the Dean and his team so they could identify the jobs to be done on board boat. After the cruise a report was made to the Chamber of Commerce Committee. The Governor's Advisor on Oceanography was at the meeting. The Dean proposed a group be organized to coordinate activities of various colleges and universities interested in oceanography.

In the Spring of 1967, the Junior College Board of Trustees was given a brief report. Because of favorable publicity, the Board listened to the report carefully, but they made no commitment.

The proposed two year programs in aquatechnology will be presented to the board this spring. The Dean indicated that the program will sell its self and that there will be pressures for adoption of the program forthcoming from the community. He also said that there are several sources of funding available. A major source would be from local and state money. The Sea Grant Legislation, foundation grants, and a proposed cooperative project to develop video tapes for oceanographic instruction at an inland university in another state promise to bring in more resources.

In the critique that follows, several basic questions will be answered: (1) What was to be changed? (2) What conditions or people created pressure for change? (3) How was the change to occur? The contributions of Rogers and Brickell will then be examined to see how they contribute to a better understanding of the problem.

What was to be changed? The first thing that is obvious is that the aquatechnology program would change the junior college curriculum by adding new courses to the curriculum. It would also change some of the methods of teaching because the program would take students to sea on cruises, utilize video tapes for instruction, and take the students into several of the oceanographic research organizations in the community. The staff would also

have to be changed. New staff members would have to be hired, and present staff members would, in some cases, be asked to teach some of the new courses. Many of the present staff members would have to take training or prepare themselves to teach oceanographic courses. Many new instructional materials and equipment would be used, including sea-going vessels and video tape recorders. Time modules would also be changed. Students and teachers making field trips and lengthy voyages would call for new accounting procedures for payroll purposes and units of credit. The extensive use of off-campus experiences would call for the use of instructional space in the community as well as at sea. Student grouping, testing practices, and attendance accounting would also be effected.

Potentially, the aquatechnology program as outlined by the Dean in the interview, would bring many changes if adopted. Such a revolutionary program would require tremendous thrust to be successfully adopted by any educational institution.

The thrust for this program did not come from the students, the teachers, the chief administrator, the Board of Education, or society in general. The main thrust for the program came from several potential employers in the community and many interested individuals from throughout the country and even in foreign countries. The basic question is whether or not the excitement generated by these enthusiastic, but widely scattered individuals can be transmitted to key decision makers such as the chief administrator and the Board of Education. This responsibility lies primarily with the Dean of Vocational Education. If he can sell them on the idea that they should have such a program, the <u>first</u> of many battles will be won.

How does change occur? If this program is adopted and implemented, how will it happen? This proposed program is very definitely a planned change. It will probably not be a voluntary change, because ultimately a cadre of

instructors will probably have to be hired from the outside and brought in to implement the program. It is definitely not a grass-roots movement as far as the faculty is concerned.

In looking to the writings of Rogers discussed in Chapter III, several of his generalizations fit this particular case study. They are:

> 14. The relative advantage of a new idea, as perceived by members of a social system, affects its rate of adoption.
>
> 15. The compatibility of a new idea, as perceived by members of a social system, affects its rate of adoption.
>
> 16. The complexity of an innovation, as perceived by members of a social system, affects its rate of adoption.
>
> 49. The extent of promotional efforts by change agents is directly related to the rate of adoption of an innovation. (13:312-314)

Brickell also has some generalizations in his research report that lend themselves to this case study:

> 2. The board of education in most communities is not a strong agent in determining the path of educational innovation, but its influence is decisive when exerted. Implication: New programs must be disseminated in a manner which will not arouse the opposition of boards of education. (2:21)
>
> 3. New types of instructional programs are introduced by administrators. Contrary to general opinion, teachers are not change agents for instructional innovations of major scope. Implication: To disseminate new types of instructional programs, it will be necessary to convince administrators of their value. (2:22)
>
> 8. New instructional programs can be successfully introduced despite initial apathy or even opposition on the part of a number of teachers. Implication: It is not necessary to wait until faculty opinion is unanimous before making a change in instructional pattern. (2:31)

To summarize the first case study it will have to be stated that from information gathered from the literature on the change process, it would appear that the chances of the aquatechnology program being adopted by the Board of Education and implemented by the college faculty are not good. If the Dean, who is the change agent, is to succeed in getting his proposal accepted we will have to overcome many obstacles, the first one being apathy

on the part of the Board and community, the second being financial, and the third being the disruptive influence of implementing a new program like this on the typical junior college campus. If he is successful in getting the program adopted and implemented, it will be because of his enthusiasm, determination, and skill as a change agent.

Case Study - Part Two: Field Testing a New Home Health Aid Training Program

The Paramedical Division Chairman at the college and her staff recognized the need for a Home Health Aid Training Program, which would combine the Nurses Aid Program and the Home Health Aid Program into one program. Their line of reasoning was that by giving vocational students a broader program that would qualify them for both the Nurses Aid Certificate and the Home Health Aid Certificate, they would be much more employable.

The Division Chairman contacted both the State Board of Vocational Nurse Examiners and the Visiting Nurses' Association and proposed combining the two training programs. Both organizations were agreeable to a trial program after reviewing the proposed curriculum. The staff of the Paramedical Division wrote a vocational education project to finance the program. The project was approved and the program is in operation this year.

The program has been evaluated by both the Vocational Nurse Examiners and the Visiting Nurses' Association. Next year a semester-long evaluation will be made of the graduates of the program to see how effective the program has been.

In the following paragraphs several questions will be answered: (1) What was to be changed? (2) What conditions or people created pressure for change? (3) How was the change to occur?

What was to be changed? Essentially the curriculums of two separate, but related and overlapping programs were to be combined into one program.

Students from both programs were to be put together and treated as one group. The staff of the Paramedical Division would teach the new program. There was little need for retraining staff members, because they would be teaching the same content in the new program as they had in the old.

What conditions or people created pressure for change? Pressure for change came from the staff of the division that was to be effected. They initiated and promoted the change with the support of the administration and two state organizations.

How was the change to occur? The change would occur at the beginning of the second semester when the new training program would begin. The staff already had prepared themselves to teach the new program, and the students would be beginning the program as new students.

It would appear from the evidence presented that this program will be successful at least through the first year. The evaluation may show that the combining of the two programs does not improve the graduates or their opportunities for employment. This is part of the program, however, and if the evaluation indicates that the new program is a failure, the field test will still have been a success. If the evaluation shows that the new program is better than the old programs it replaced, then the new program will probably be adopted as a regular part of the curriculum, because of the positive support given to it by the division staff, administration and the two state organizations.

Case Study - Part Three: Aeronautics Degree Program, Implementing and Existing Program into the College

While working with an electronics engineering instructor, the Dean of Vocational Education discovered that the instructor was bored with teaching electronics. He was not interested in up-dating the program or improving

his instruction. The Dean worked with him patiently for several sessions. One unproductive day, the Dean asked him what he would really like to be doing. The instructor said that he would really like to be flying. He had retired from the Air Force several years ago and had not flown since.

The Dean used this statement of interest as a springboard and suggested that if he were really interested in flying, he might want to develop a class in ground school which could be offered in the evening program. With this encouragement, the instructor began to develop the outline for a class on his own time. He contacted various government agencies to find instructional films and other materials that he might use.

A meeting was called of all students interested in forming an aero club. A basic ground school course was offered in the fall of 1967. To the surprise of the instructor and the Dean, 53 students signed up for the class. These initial successes motivated the instructor to work harder to develop a complete AA Degree program in aeronautics.

Although no research and development funds had been allocated for the development of this program, the Dean helped the instructor get the necessary instructional aids that he needed, the necessary information that he needed, and supplied him with the necessary secretarial help. A telephone survey was made to Missouri, Arizona, and other California colleges that had similar courses. FAA approval for the course was requested and received.

The instructor became so intensely interested in his project, that he took his G. I. Bill and used it to retrain himself in flying. He first renewed his private license, then his commercial license, and is currently working on his instructor's license. The instructor became concerned with the funding of the program. He applied for and received a Vocational Education Credential and is preparing to write a vocational education project to fund the program. The college will send him to a national conference on aeronautic education in St. Louis this year.

This semester three courses are being offered. The complete program is composed of: general education - 16½ units, aeronautics - 39 units, and electives - 4½ units.

What was changed? The key change that occurred was the change in attitude and outlook by the instructor. By allowing him the freedom to develop a series of courses in which he was interested, he was transformed from a passive, disinterested individual into a self-directed, self-motivated individual. This is the kind of change that Carl Rogers advocates. (12:717-730)

What conditions or people created pressure for change? The instructor was the main force behind the change that occurred. No great cry came from the community or any other place for this program. The development of this program was a risk that the Dean and the instructor decided to take without a great deal of research as to the needs for the program. The 53 students who enrolled for the first class were the only evidence of need and interest that they had. It would have been extremely dissappointing and distructive to the morale of the instructor, if the program had not attracted sufficient students to make it go. Fortunately for the instructor and the program, this did not happen.

How did the change occur? The change occurred in two phases: (1) the motivation of the instructor and (2) the implementation of a program which already existed on other junior college campuses. One instructor could not have been expected to develop a complete two-year program by himself if that program had to be completely researched and developed, but in this case study, it was more a process of borrowing ideas and existing courses from other institutions and agencies and implementing and modifying them to fit the local situation.

CHAPTER V

SUMMARY AND CONCLUSIONS

This research paper has tried to answer the questions: (1) How does the junior college administrator set the stage for change? (2) How does he influence staff members? (3) How does he create a climate in which change not only <u>can</u> take place but <u>does</u> take place? (4) What strategies can he use? (5) What obstacles must he overcome?

In making the study, several assumptions were made: (1) There is a need for some changes to be made in junior college curriculum and instruction in order to meet the needs of students and society today and tomorrow. (2) The junior college administrator has a major role to play in bringing about change. (3) There is a rationale for change which can be found in the literature on change and which can be applied to the junior college.

Two hypotheses have been formulated for this study: (1) Successful endeavors to bring about change can be explained by the rationale. (2) Unsuccessful endeavors to bring about change can also be explained by the rationale. Although several changes discussed in the case study of the Dean of Vocational Education in one college appear to be successful, none of the new programs had been carried through to completion; therefore, it cannot be stated for certain that the hypotheses are true. The evidence available, however, at the time of the study leads the writer to tentatively accept the hypotheses.

Change is a complex process in any social setting. Change is an extremely complex process in a school setting. Any individual or group of individuals, be they teachers or administrators, should take note of the process of change before attempting to bring about change. The data presented in this study leads the writer to conclude that many failures to bring about change could be avoided and many successes assured if the agents of change knew more about the process of change.

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